

Simpson gives for the genus *Anodontites* a masculine ending, but Ortmann observes that since the type was originally written *Anodontites crispata* by its author, the genus should be regarded as feminine.

FOSSIL SHELLS FROM THE ST. LUCIE CANAL, FLORIDA

BY CHARLES W. JOHNSON

I recently examined a small but interesting collection of shells secured by Mr. Frederick Nelson, an engineer, while at work on the dredge that is digging the St. Lucie Canal to Lake Okeechobee. This canal is to be a deep water canal with locks. About eight miles from the east coast the canal passes through a strip of pine woods and it was while excavating there at a depth of about 40 feet below the surface that the shells were obtained.

There were six specimens referable to *Busycon maximum* var. *tritonis* Conr. of the Duplin beds of North Carolina. The younger specimens were almost typical of that horizon, but in form the older ones resemble small examples of the recent *B. carica* Gmel. They are broad and thick in proportion to their size, but lack the very large spines and enlarged canal of the body whorl, characteristic of the recent var. *eliceans* Montf. of the Indian River, Florida. In all cases the enamel of the aperture was well preserved. The four *Busycon perversum* L. were also peculiar, one young specimen was a typical var. *contrarius* Conr. of the Duplin, while a second was a form common in the Caloosahatchie Pliocene, called *obrapum* by Grabau (Amer. Nat., Aug., 1903), characterized by a small rounded body whorl, with a long straight canal. The others are huge adult shells, with broad low spires, the body whorl slightly encroaching on the preceding whorl at the suture, the canal short and somewhat curved; as a whole they resemble the recent shells of the eastern coast of Florida. One was perforated by the boring sponge, and the other had the enamel of the aperture well

preserved. Some grayish sand that was obtained from the interior of the latter shell contained the following species:

<i>Crepidula fornicata</i> L (juv.).	<i>Pleuromeris tridentata</i> Say.
<i>Crepidula aculeata</i> Gmel.	<i>Chione cancellata</i> L.
<i>Eulima</i> sp? (polished)	<i>Chione pygmaea</i> Lam.
<i>Astyris lunata</i> (with color markings).	<i>Dosinia discus</i> Rve. (juv.).
<i>Oliva mutica</i> Say.	<i>Donax variabilis</i> Say (common).
<i>Mangelia cerina</i> K. & S.	<i>Donax fossor</i> Say ?
<i>Arca transversa</i> Say.	<i>Mulinia lateralis</i> Say.
<i>Glycymeris pectinata</i> Gmel.	<i>Corbula</i> sp?

The other large shells were two *Fasciolaria gigantea* Kien., about 20 inches in length. One has small nodes on the shoulders of all the whorls, the other has the shoulders and nodes both wanting, except in a few of the early whorls. If recent, the latter would be considered a very large example of the var. *reevei* Jonas. A number of *Oliva sayana* Rav. (*O. litterata* Lam.) were highly polished and some some showed the dark brown letter-like markings, a large *Crepidula fornicata* L., two large thick shells of *Venus campechensis* Gmel. (*V. mortoni* Con.), a large valve of *Glycymeris americana* Defr., and two modern looking oyster shells, constituted the collection.

With the meager data and material at hand, it is difficult to draw any definite conclusions. Mr. Nelson said that shells were first obtained at about 35 feet and as deep as 45 feet. Two beds may therefore be involved. Dr. Wm. H. Dall in his "Tertiary Fauna of Florida" (Trans. Wagner Free Inst. Sci., Vol. 9, pt. 6, p. 1594) says: "The Miocene appears as a soft limestone rock in the vicinity of Jacksonville, and has been traced by material from artesian wells on the east side of the peninsula as far south as Lake Worth." Although many of the recent shells listed are found in the Miocene, *Busycon maximum tritonis* and *B. perversum contrarius*, are the only ones in any way characteristic; the form *obrapum* I have only seen from the Florida Pliocene. The formation deserves a careful study.